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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,385	01/30/2006	Tetsuya Bono	126308	5512

25944 7590 10/29/2010

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EXAMINER	
WOOD, JARED M	

ART UNIT	PAPER NUMBER
1731	

NOTIFICATION DATE	DELIVERY MODE
10/29/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction25944@oliff.com
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Office Action Summary	Application No.	Applicant(s)	
	10/566,385	BONO, TETSUYA	
	Examiner	Art Unit	
	JARED WOOD	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 September 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The examiner acknowledges receipt of the response filed 09/16/2010. Claims 1-8 are currently pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2002-352837 (Saito).

As to claims 1, Saito discloses a fuel cell system which comprises a fuel cell stack (abstract), a load device (¶ 0005), a fuel gas feeder (¶ 0039) and air supply equipment (¶ 0043) (gas supply unit), an anode and a cathode (¶ 0002) which receive fuel gas and oxidizing gas respectively from the fuel gas feeder and the air supply equipment, a control section (¶ 0038), and a supply pressure limiting valve (¶ 0040) and an exhaust gas pressure control valve (¶ 0045). Saito discloses the inclusion of a voltage sensor in his fuel cell system (¶ 0063) configured to sense the output voltage of the fuel cell stack (across the anode and cathode of the fuel cell) which sensor is configured also to provide data to the control section (¶ 0063). Saito discloses a number of pressure sensors located in the fuel supply and return lines (¶ 0039 and 0041) which provide data to the control section. Saito's control section comprises a computer as evidenced by

statements in each of ¶ 77-79, 94, and 127 which show the control section performing calculations, particularly based upon input from the sensors. Claim 1 further contains functional limitations for many components especially those of the gas permeation quantity estimation unit and the correction unit. Applicant is reminded that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997), see MPEP 2114. The structural prior art features, though not disclosed to be used in the manner suggested by applicant, are nevertheless capable of performing the claimed functions. Further evidence of the capability of Saito's fuel cell system to perform the claimed functions of applicant's fuel cell system is found in ¶ 50-141 of Saito where Saito discloses a variety of methods of control of the fuel cell system, including its associated valving, carried out by the control section based upon input from voltage, pressure, and temperature sensors. This shows the versatility of Saito's control section as well as its capability of performing control functions based upon sensory input.

As to claims 2 and 3, although the limitations of claims 2 and 3 contain only functional limitations which could be performed by the above listed prior art system, these functional limitations do imply the need for a voltage sensor to detect the voltage output of the fuel cell stack. Saito discloses the inclusion of a voltage sensor in his fuel cell system (¶ 0063).

As to claims 4 and 5, although the limitations of claims 2 and 3 contain only functional limitations which could be performed by the above listed prior art system these, functional limitations do imply the need for a pressure sensor located in the fuel supply line to detect the

fuel gas pressure. Saito discloses a number of pressure sensors located in the fuel supply and return lines (¶ 0039 and 0041).

As to claims 6-8, these claims contain only functional limitations. Applicant is reminded that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997), see MPEP 2114. The structural prior art features, though not disclosed to be used in the manner suggested by applicant, are nevertheless capable of performing the claimed functions.

Response to Arguments

Applicant's arguments filed 09/16/2010 have been fully considered but they are not persuasive. On page 5, applicant has argued that Saito fails to disclose a control section comprising a computer configured to control. Further applicant has argued that Saito fails to disclose a control section comprising a computer which controls based upon the first and second detectors. These arguments are entirely without merit. The examiner has clearly shown that the disclosure of Saito provides each of these features as provided above.

Applicant argues on page 6 that the examiner has misapplied the findings of In re Schreiber in the previously issued rejection. However, MPEP 2114 states clearly "[w]hile features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997)".

Applicant further seeks to distinguish claim 1 from the facts of Schreiber by pointing out the structural features of claim 1. However the examiner has acknowledged that the features cited in the second paragraph of page 6 are structural features and are disclosed by Saito. The examiner has never suggested that applicant's claim 1 is merely an intended use, but rather has pointed out the structural features of applicant's claim 1 and the functional limitations of claim 1 which provide no physical structure and has applied the disclosure of Saito to meet the structural limitations as well as to show how Saito's fuel cell system is capable of performing the claimed functional limitations.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JARED WOOD whose telephone number is (571)270-5911. The examiner can normally be reached on Monday - Friday, 7:30 am - 5:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JARED WOOD/
Examiner, Art Unit 1731

/J.A. LORENGO/
Supervisory Patent Examiner, Art Unit 1731